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EXAMINER

THOMPSON, JAMES A

ART UNIT

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NOTIFICATION DATE

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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<b>Office Action Summary</b>	<b>Application No.</b> 10/814,700	<b>Applicant(s)</b> HART ET AL.	
	<b>Examiner</b> JAMES A. THOMPSON	<b>Art Unit</b> 2625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 9/6/07, 10/26/07, 1/14/08, and 1/23/08.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☐ Claim(s) \_\_\_\_\_ is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-112 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>9/6/07, 10/26/07, 1/23/08</u> . | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION*****Response to Arguments***

1. Applicant's arguments filed 14 January 2008 have been fully considered but they are not persuasive. Firstly, Steele (USPN 5,884,056) does teach the newly amended limitations that have been brought into the independent claims, as fully demonstrated by the prior art rejections set forth below. While Steele is not directed to a printer, Steele is directed to video data processing, which is an aspect of the system of Sugiyama (USPN 5,633,723). Although Sugiyama is also concerned with other fields of endeavor, such as printing, video image display, selective image data output, and others, both Sugiyama and Steele are concerned with the processing, control and output of video data.

The combination of Sugiyama and Steele teaches the newly amended independent claims, as set forth below in the prior art rejections. The new grounds of rejection have been necessitated by the present amendments to the claims. Accordingly, the present action is made final.

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. **Claims 1, 15-16, 35, 47, 50, 65, 78, 92-93 and 112 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sugiyama (US Patent 5,633,723) in view of Steele (US Patent 5,884,056).**

**Regarding claim 1:** Sugiyama discloses a multifunction printer (figure 1 of Sugiyama) for printing time-based media (column 3, lines 11-15 of Sugiyama – *video data is time-based media*), the multifunction printer comprising: a communication interface (figure 1(11) of Sugiyama) for receiving time-based media data from a media source (column 3, lines 11-20 of Sugiyama); a processor (figure 1(31) of Sugiyama) for performing a multimedia function on the time-based media data to identify a portion of the time-based media data to be printed to a tangible medium, the identified portion based on identification criteria received from a user (figure 4 and column 5, lines 45-64 of Sugiyama – *particular frames are captured and organized in a mosaic for printing based on settings and criteria entered by user*); a user interface (figure 1(18-25) of Sugiyama), communicatively coupled to the processor (as can

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be seen in figure 1 of Sugiyama), including: a display (figure 1(18-20) of Sugiyama), for providing data to the user (column 3, lines 34-48 of Sugiyama), and an input device (figure 1(21-25) of Sugiyama), for receiving a selection of the multimedia function from a plurality of selectable multimedia functions and for receiving the identification criteria from the user (column 3, line 41 to column 4, line 8 of Sugiyama – *input keys provide a variety of functions, including number of sub-frames for mosaic pattern, and frames to be captured*); a first output device (figure 1(30-33) of Sugiyama) for receiving the identified portion of the time-based media data from the processor and printing the identified portion (column 4, lines 3-8 and lines 35-42 of Sugiyama); and a second output device (figure 1(18-20) of Sugiyama) coupled to the processor (as can be seen in figure 1 of Sugiyama) for receiving the identified portion of the time-based media and producing an electronic output including the identified portion of the time-based media (column 5, lines 2-7 of Sugiyama).

Sugiyama does not disclose expressly that said portion identification is performed automatically; that said display and said second output device are separate devices; and that said data provided to the user includes a timeline of the time-based media indicating a location of the identified portion along the timeline, the timeline updated responsive to the user changing the identification criteria.

Steele discloses automatically identifying a portion of time-based media data to be output (column 7, lines 41-54 of Steele); using separate displays for a user interface (figure 6 and column 7, line 62 to column 8, line 2 of Steele) and an output device (figure 7 and column 8, lines 10-23 of Steele); and that said data provided to the user includes a timeline of the time-based media indicating a location of the identified portion along the timeline (figure 7 and column 8, lines 24-36 of Steele), the timeline updated responsive to the user changing the identification criteria (column 8, lines 48-55 of Steele – *user changes how broadly or narrowly to browse the video and where in the video to browse*).

Sugiyama and Steele are combinable because they are from the same field of endeavor, namely the processing, control and output of video data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to perform identification automatically based on preselected criteria and displaying the associated timeline to the user, as taught by Steele. The motivation for doing so would have been to more efficiently process the video image data and allow the user to make updated changes based on the obtained results. Also, using separate electronic displays for the user interface and the second output device would have been an obvious modification to make for one of ordinary skill in the art at the time of the invention, and would have generated predictable results, namely separate views for interfacing with computer and viewing the resultant output. Therefore, it would have been obvious to combine Steele with Sugiyama to obtain the invention as specified in claim 1.

**Further regarding claim 47:** Steele discloses that the user interface is configured to allow a user to control a world wide web display (column 5, lines 52-55 of Steele).

**Regarding claim 50:** Sugiyama discloses that the processor is further configured to display results of the multimedia function on the display of the user interface (column 5, lines 2-7 of Sugiyama).

**Further regarding claim 65:** Steele discloses that the second output device is a world wide web display (figure 7 and column 5, lines 52-55 of Steele).

**Regarding claim 78:** Sugiyama discloses a method for printing time-based media (column 3, lines 11-15 of Sugiyama – *video data is time-based media*), the method comprising: receiving time-based media data from a media source (column 3, lines 11-20 of Sugiyama); receiving a user selection of a multimedia function from a plurality of selectable multimedia functions, the multimedia function to be applied to time-based media data (column 3, line 41 to column 4, line 8 of Sugiyama – *input keys provide a variety of functions, including number of sub-frames for mosaic pattern, and frames to be captured*); performing, by a multifunction printer, the multimedia function on the time-based media data to identify a portion of the time-based media data to be printed to a tangible medium based on identification criteria received from the user (figure 4 and column 5, lines 45-64 of Sugiyama – *particular frames are captured and organized in a mosaic for printing based on settings and criteria entered by user*); printing the identified portion of the time-based media data (column 4, lines 3-8 and lines 35-42 of Sugiyama); and producing an electronic output of the identified portion of the time-based media data (column 5, lines 2-7 of Sugiyama).

Sugiyama does not disclose expressly that said portion identification is performed automatically; and displaying a representation of the time-based media including a timeline of the time-based media indicating a location of the identified portion along the timeline, the representation updating responsive to the user changing the identification criteria.

Steele discloses automatically identifying a portion of time-based media data to be output (column 7, lines 41-54 of Steele); and displaying a representation of the time-based media including a timeline of the time-based media indicating a location of the identified portion along the timeline (figure 7 and column 8, lines 24-36 of Steele), the representation updating responsive to the user changing the identification criteria (column 8, lines 48-55 of Steele – *user changes how broadly or narrowly to browse the video and where in the video to browse*).

Sugiyama and Steele are combinable because they are from the same field of endeavor, namely the processing, control and output of video data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to perform identification automatically based on preselected criteria

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and displaying the associated timeline to the user, as taught by Steele. The motivation for doing so would have been to more efficiently process the video image data and allow the user to make updated changes based on the obtained results. Therefore, it would have been obvious to combine Steele with Sugiyama to obtain the invention as specified in claim 78.

**Further regarding claims 15 and 92:** Steele discloses selecting a range of video data in response to received input from the user (column 6, lines 13-17 and column 8, lines 24-31 of Steele).

**Further regarding claims 16 and 93:** Steele discloses applying a video event detection function to the time-based media data (column 7, lines 49-54 of Steele).

**Regarding claims 35 and 112:** Sugiyama discloses that the multimedia function includes applying a visual inspection function to the time-based media data (column 4, lines 32-34 of Sugiyama – *user must visually inspect the displayed image to see if it is desirable to print*).

**4. Claims 2-4, 7-8, 18-23, 42-43, 62, 74, 79-81, 84-85 and 95-100 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sugiyama (US Patent 5,633,723) in view of Steele (US Patent 5,884,056) and Chino (US Patent 6,118,888).**

**Regarding claims 2 and 79:** Sugiyama in view of Steele does not disclose expressly that said multimedia function includes selecting a range of audio data in response to received input from the user.

Chino discloses selecting a range of audio data in response to received input from the user (column 14, lines 8-18 of Chino). Only the audio data that is intended to be input by the user is input in response to the appropriate user input, while any other noise is ignored by the system (column 14, lines 8-18 of Chino).

Sugiyama in view of Steele is combinable with Chino because they are from the same field of endeavor, namely the control and processing of time-based media data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to allow the user to input only a specifically desired range of audio data, as taught by Chino. The motivation for doing so would have been to prevent unintended and erroneous audio input (column 14, lines 10-11 of Chino). Therefore, it would have been obvious to combine Chino with Sugiyama in view of Steele to obtain the invention as specified in claims 2 and 79.

**Regarding claims 3 and 80:** Sugiyama in view of Steele does not disclose expressly that said multimedia function includes applying audio event detection to the time-based media data.

Chino discloses applying audio event detection to the time-based media data (column 14, lines 8-18 of Chino). The system detects when audio data is intended to be input by the user, while any other noise is ignored by the system (column 14, lines 8-18 of Chino).

Sugiyama in view of Steele is combinable with Chino because they are from the same field of endeavor, namely the control and processing of time-based media data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to detect audio data events, as taught by Chino. The motivation for doing so would have been to prevent unintended and erroneous audio input (column 14, lines 10-11 of Chino). Therefore, it would have been obvious to combine Chino with Sugiyama in view of Steele to obtain the invention as specified in claims 3 and 80.

**Regarding claims 4 and 81:** Sugiyama in view of Steele does not disclose expressly that the multimedia function includes determining a confidence level associated with the audio event detection.

Chino discloses that an audio event is detected (column 14, lines 8-11 of Chino) based on specific criteria that are to be met to the satisfaction of a computer automated system (column 14, lines 11-19 of Chino). Thus, a confidence level associated with the audio event detection is determined.

Sugiyama in view of Steele is combinable with Chino because they are from the same field of endeavor, namely the control and processing of time-based media data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to detect audio data events based on a determined confidence level, as taught by Chino. The motivation for doing so would have been to prevent unintended and erroneous audio input (column 14, lines 10-11 of Chino). Therefore, it would have been obvious to combine Chino with Sugiyama in view of Steele to obtain the invention as specified in claims 4 and 81.

**Regarding claims 7 and 84:** Sugiyama in view of Steele does not disclose expressly that said multimedia function includes applying a sound source localization function to the time-based media data.

Chino discloses applying a sound source localization function to time-based media data (column 13, lines 5-14 of Chino). By using the gaze object detection portion of the multi-modal interface apparatus, the audio sound source localization is determined.

Sugiyama in view of Steele is combinable with Chino because they are from the same field of endeavor, namely the control and processing of time-based media data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to configure the user interface to apply a sound source localization function to the time-based media data, as taught by Chino. The motivation for doing so would have been to ensure that user input is intended, and the user is not speaking to someone

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else (column 1, lines 52-58 of Chino). Therefore, it would have been obvious to combine Chino with Sugiyama in view of Steele to obtain the invention as specified in claims 7 and 84.

**Regarding claims 8 and 85:** Sugiyama in view of Steele does not disclose expressly that said multimedia function includes applying audio event detection to the time-based media data.

Chino discloses applying audio event detection to the time-based media data (column 14, lines 8-18 of Chino). The system detects when audio data is intended to be input by the user, while any other noise is ignored by the system (column 14, lines 8-18 of Chino).

Sugiyama in view of Steele is combinable with Chino because they are from the same field of endeavor, namely the control and processing of time-based media data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to detect audio data events, as taught by Chino. The motivation for doing so would have been to prevent unintended and erroneous audio input (column 14, lines 10-11 of Chino). Therefore, it would have been obvious to combine Chino with Sugiyama in view of Steele to obtain the invention as specified in claims 8 and 85.

**Regarding claims 18 and 95:** Sugiyama in view of Steele does not disclose expressly that said multimedia function includes applying a face detection function to the time-based media data.

Chino discloses applying a face detection function to time-based media data (figure 20(406) and column 24, lines 25-27 of Chino).

Sugiyama in view of Steele is combinable with Chino because they are from the same field of endeavor, namely the control and processing of time-based media data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to apply a face detection function to time-based media data, as taught by Chino. The motivation for doing so would have been to determine which particular user corresponds to the current user by recognition of the current user's face (column 26, lines 20-22 of Chino). Therefore, it would have been obvious to combine Chino with Sugiyama in view of Steele to obtain the invention as specified in claims 18 and 95.

**Further regarding claims 19 and 96:** Chino discloses applying a clustering function to the time-based media data to merge multiple instances of a face into a representative image (column 26, lines 1-12 of Chino).

**Regarding claims 20 and 97:** Sugiyama in view of Steele does not disclose expressly that said multimedia function includes applying a face recognition function to the time-based media data.

Chino discloses applying a face recognition function to time-based media data (figure 20(406) and column 24, lines 25-27 of Chino).



Sugiyama in view of Steele and Chino are combinable because they are from the same field of endeavor, namely the control and processing of time-based media data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to apply a face recognition function to time-based media data, as taught by Chino. The motivation for doing so would have been to determine which particular user corresponds to the current user by recognition of the current user's face (column 26, lines 20-22 of Chino). Therefore, it would have been obvious to combine Chino with Sugiyama in view of Steele to obtain the invention as specified in claims 20 and 97.

**Regarding claims 21 and 98:** Sugiyama in view of Steele does not disclose expressly that the multimedia function includes applying an optical character recognition function to the time-based media data.

Chino discloses applying an optical character recognition function to time-based media data (figure 3(102j) and column 7, lines 14-18 of Chino).

Sugiyama in view of Steele is combinable with Chino because they are from the same field of endeavor, namely the control and processing of time-based media data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to apply an optical character recognition function to time-based media data, as taught by Chino. The suggestion for doing so would have been that character recognition from an electronic pen is simply another useful electronic means to input data into a computerized system (figure 3 and column 7, lines 2-11 of Chino). Therefore, it would have been obvious to combine Chino with Sugiyama in view of Steele to obtain the invention as specified in claims 21 and 98.

**Further regarding claims 22 and 99:** Chino discloses applying a clustering function to the time-based media data to merge similar results of the optical character recognition (column 7, lines 15-21 of Chino). The particular language input by the user, such as German, Russian and Chinese, which use different character sets, is detected. The particular language determines the cluster of characters to use in optical character recognition (column 7, lines 15-21 of Chino).

**Regarding claims 23 and 100:** Sugiyama in view of Steele does not disclose expressly that the multimedia function includes applying a motion analysis function to the time-based media data.

Chino discloses applying a motion analysis function to time-based media data (figure 3(102f) and column 7, lines 33-38 of Chino).

Sugiyama in view of Steele is combinable with Chino because they are from the same field of endeavor, namely the control and processing of time-based media data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to apply a motion analysis function to

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time-based media data, as taught by Chino. The suggestion for doing so would have been that detection of a user's motion and gestures is simply another useful electronic means to input data into a computerized system (figure 3 and column 7, lines 2-11 of Chino). Therefore, it would have been obvious to combine Chino with Sugiyama in view of Steele to obtain the invention as specified in claims 23 and 100.

**Regarding claim 42:** Sugiyama in view of Steele does not disclose expressly that said user interface is configured to allow a user to control audio sound localization hardware.

Chino discloses controlling audio sound localization hardware (column 13, lines 5-14 of Chino). By using the gaze object detection portion of the multi-modal interface apparatus, the audio sound localization is determined.

Sugiyama in view of Steele is combinable with Chino because they are from the same field of endeavor, namely the control and processing of time-based media data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to configure said user interface to allow a user to control audio sound localization hardware, as taught by Chino. The motivation for doing so would have been to ensure that user input is intended, and the user is not speaking to someone else (column 1, lines 52-58 of Chino). Therefore, it would have been obvious to combine Chino with Sugiyama in view of Steele to obtain the invention as specified in claim 42.

**Regarding claim 43:** Sugiyama in view of Steele does not disclose expressly that said user interface is configured to allow a user to control motion detection hardware.

Chino discloses controlling motion detection hardware (figure 3(102f) and column 7, lines 33-38 of Chino).

Sugiyama in view of Steele is combinable with Chino because they are from the same field of endeavor, namely the control and processing of time-based media data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to configure said user interface to allow a user to control motion detection hardware, as taught by Chino. The suggestion for doing so would have been that detection of a user's motion and gestures is simply another useful electronic means to input data into a computerized system (figure 3 and column 7, lines 2-11 of Chino). Therefore, it would have been obvious to combine Chino with Sugiyama in view of Steele to obtain the invention as specified in claim 43.

**Regarding claim 62:** Sugiyama in view of Steele does not disclose expressly that the second output device is audio sound localization hardware.

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Chino discloses controlling as an output device audio sound localization hardware (column 13, lines 5-14 of Chino). By using the gaze object detection portion of the multi-modal interface apparatus, the audio sound localization is determined.

Sugiyama in view of Steele is combinable with Chino because they are from the same field of endeavor, namely the control and processing of time-based media data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to output audio data through audio sound localization hardware, as taught by Chino. The motivation for doing so would have been to ensure that user input is intended, and the user is not speaking to someone else (column 1, lines 52-58 of Chino). Therefore, it would have been obvious to combine Chino with Sugiyama in view of Steele to obtain the invention as specified in claim 62.

**Regarding claim 74:** Sugiyama in view of Steele does not disclose expressly that the second output device is hardware for capturing data from an electronic pen.

Chino discloses controlling as an output device hardware for capturing data from an electronic pen (figure 3(102i) and column 7, lines 14-16 of Chino).

Sugiyama in view of Steele is combinable with Chino because they are from the same field of endeavor, namely the control and processing of digital data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to use hardware for capturing data from an electronic pen, as taught by Chino. The suggestion for doing so would have been that an electronic pen is simply another useful output device that provides digital data a user may wish to obtain (figure 3 and column 6, lines 66-67 of Chino). Therefore, it would have been obvious to combine Chino with Sugiyama in view of Steele to obtain the invention as specified in claim 74.

**5. Claims 5-6 and 82-83 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sugiyama (US Patent 5,633,723) in view of Steele (US Patent 5,884,056) and Kametani (US Patent 5,091,948).**

**Regarding claims 5 and 82:** Sugiyama in view of Steele does not disclose expressly that said multimedia function includes applying a speaker segmentation function to the time-based media data.

Kametani discloses applying a speaker segmentation function to time-based media data (figure 3d and column 5, lines 5-9 and lines 29-33 of Kametani).

Sugiyama in view of Steele is combinable with Kametani because they are from the same field of endeavor, namely the control and processing of time-based media data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to apply a speaker segmentation function

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to said time-based media data, as taught by Kametani. The motivation for doing so would have been that using a speaker segmentation function extracts parameters that uniquely identify a speaker, thus improving the level of speaker discrimination (column 5, lines 29-35 of Kametani). Therefore, it would have been obvious to combine Kametani with Sugiyama in view of Steele to obtain the invention as specified in claims 5 and 82.

**Further regarding claims 6/1, 6/5, and 83/78, 83/82:** Kametani discloses applying a speaker recognition function to said time-based media data (column 5, lines 29-35 of Kametani).

**6. Claims 9-10 and 86-87 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sugiyama (US Patent 5,633,723) in view of Steele (US Patent 5,884,056) and Halverson (US Patent Application Publication 2002/0101513 A1).**

**Regarding claims 9 and 86:** Sugiyama in view of Steele does not disclose expressly that said multimedia function includes applying a speech recognition function to said time-based media data.

Halverson discloses applying a speech recognition function to time-based media data (para. 24, lines 2-5 and para. 25, lines 21-23 of Halverson).

Sugiyama in view of Steele is combinable with Halverson because they are from the same field of endeavor, namely the control and processing of time-based media data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to apply a speech recognition function, as taught by Halverson. The motivation for doing so would have been that speech is a useful and natural form of human input (para. 25, lines 11-14 of Halverson). Therefore, it would have been obvious to combine Halverson with Sugiyama in view of Steele to obtain the invention as specified in claims 9 and 86.

**Further regarding claims 10 and 87:** Halverson discloses applying a profile analysis function to the time-based media data (para. 23, lines 4-7 of Halverson).

**7. Claims 11, 14, 88 and 91 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sugiyama (US Patent 5,633,723) in view of Steele (US Patent 5,884,056), Halverson (US Patent Application Publication 2002/0101513 A1), and Chino (US Patent 6,118,888).**

**Regarding claims 11 and 88:** Sugiyama in view of Steele and Halverson does not disclose expressly that said multimedia function includes applying audio event detection to the time-based media data.

Chino discloses applying audio event detection to the time-based media data (column 14, lines 8-18 of Chino). The system detects when audio data is intended to be input by the user, while any other noise is ignored by the system (column 14, lines 8-18 of Chino).

Sugiyama in view of Steele and Halverson is combinable with Chino because they are from the same field of endeavor, namely the control and processing of time-based media data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to detect audio data events, as taught by Chino. The motivation for doing so would have been to prevent unintended and erroneous audio input (column 14, lines 10-11 of Chino). Therefore, it would have been obvious to combine Chino with Sugiyama in view of Steele and Halverson to obtain the invention as specified in claims 11 and 88.

**Regarding claims 14 and 91:** Sugiyama in view of Steele and Halverson does not disclose expressly that said multimedia function includes applying a sound source localization function to the time-based media data.

Chino discloses applying a sound source localization function to time-based media data (column 13, lines 5-14 of Chino). By using the gaze object detection portion of the multi-modal interface apparatus, the audio sound source localization is determined.

Sugiyama in view of Steele and Halverson is combinable with Chino because they are from the same field of endeavor, namely the control and processing of time-based media data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to configure the user interface to apply a sound source localization function to the time-based media data, as taught by Chino. The motivation for doing so would have been to ensure that user input is intended, and the user is not speaking to someone else (column 1, lines 52-58 of Chino). Therefore, it would have been obvious to combine Chino with Sugiyama in view of Steele and Halverson to obtain the invention as specified in claims 14 and 91.

**8. Claims 12-13 and 89-90 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sugiyama (US Patent 5,633,723) in view of Steele (US Patent 5,884,056), Halverson (US Patent Application Publication 2002/0101513 A1), Chino (US Patent 6,118,888), and Kametani (US Patent 5,091,948).**

**Regarding claims 12 and 89:** Sugiyama in view of Steele, Halverson and Chino does not disclose expressly that said multi-media function includes applying a speaker recognition function to said time-based media data.

Kametani discloses applying a speaker recognition function to said time-based media data (column 5, lines 29-35 of Kametani).

Sugiyama in view of Steele, Halverson and Chino is combinable with Kametani because they are from the same field of endeavor, namely the control and processing of time-based media data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to apply a speaker recognition function to said time-based media data, as taught by Kametani. The motivation for doing so would have been that using a speaker recognition function extracts parameters that uniquely identify a speaker, thus improving the level of speaker discrimination (column 5, lines 29-35 of Kametani). Therefore, it would have been obvious to combine Kametani with Sugiyama in view of Steele, Halverson and Chino to obtain the invention as specified in claims 12 and 89.

**Regarding claims 13 and 90:** Sugiyama in view of Steele, Halverson and Chino does not disclose expressly that said multimedia function includes applying a speaker segmentation function to the time-based media data.

Kametani discloses applying a speaker segmentation function to time-based media data (figure 3d and column 5, lines 5-9 and lines 29-33 of Kametani).

Sugiyama in view of Steele, Halverson and Chino is combinable with Kametani because they are from the same field of endeavor, namely the control and processing of time-based media data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to apply a speaker segmentation function to said time-based media data, as taught by Kametani. The motivation for doing so would have been that using a speaker segmentation function extracts parameters that uniquely identify a speaker, thus improving the level of speaker discrimination (column 5, lines 29-35 of Kametani). Therefore, it would have been obvious to combine Kametani with Sugiyama in view of Steele, Halverson and Chino to obtain the invention as specified in claims 13 and 90.

**9. Claims 17, 76 and 94 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sugiyama (US Patent 5,633,723) in view of Steele (US Patent 5,884,056) and Krumm (US Patent 6,611,622 B1).**

**Regarding claims 17 and 94:** Sugiyama in view of Steele does not disclose expressly that said multimedia function includes applying a color histogram analysis function to said time-based media data.

Krumm discloses applying a color histogram analysis function to time-based media data (figure 2 (202) and column 8, lines 46-47 of Krumm).

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Sugiyama in view of Steele is combinable with Krumm because they are from the same field of endeavor, namely control and processing of time-based media data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to apply a color histogram analysis function to the time-based media data, as taught by Krumm. The motivation for doing so would have been to better identify people or objects in scenes generated subsequent to a model scene (column 8, lines 53-58 of Krumm). Therefore, it would have been obvious to combine Krumm with Sugiyama in view of Steele to obtain the invention as specified in claims 17 and 94.

**Regarding claim 76:** Sugiyama in view of Steele does not disclose expressly that the second output device is a flash memory device.

Krumm discloses outputting computer data to a flash memory device (column 7, lines 27-33 of Krumm).

Sugiyama in view of Steele is combinable with Krumm because they are from the same field of endeavor, namely control and processing of time-based media data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to have the second output device be the flash memory device taught by Krumm. The suggestion for doing so would have been that a flash memory device is one of many possible useful output devices available to those of ordinary skill in the art (column 7, lines 27-36 of Krumm). Therefore, it would have been obvious to combine Krumm with Sugiyama in view of Steele to obtain the invention as specified in claim 76.

**10. Claims 24 and 101 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sugiyama (US Patent 5,633,723) in view of Steele (US Patent 5,884,056) and Kim (US Patent 6,594,377 B1).**

**Regarding claims 24/1, 24/23, 101/78 and 101/100:** Sugiyama in view of Steele does not disclose expressly that said multimedia function includes a distance estimation function to the time-based media data.

Kim discloses applying a distance estimation to image media data (column 3, lines 33-36 of Kim).

Sugiyama in view of Steele is combinable with Kim because they are from the same field of endeavor, namely the control and processing of media data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to apply distance estimation, as taught by Kim, to the time-based media data. The motivation for doing so would have been to determine if the user, or a relevant part of the user, is within the required operational range (column 4, lines 28-34 of Kim).

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Therefore, it would have been obvious to combine Kim with Sugiyama in view of Steele to obtain the invention as specified in claims 24/1, 24/23, 101/78 and 101/100.

**11. Claims 25-26 and 102-103 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sugiyama (US Patent 5,633,723) in view of Steele (US Patent 5,884,056) and Krumm (US Patent 6,611,622 B1).**

**Regarding claims 25 and 102:** Sugiyama in view of Steele does not disclose expressly that said multimedia function includes applying a foreground/background segmentation function to said time-based media data.

Krumm discloses applying a foreground/background segmentation function to time-based media data (column 10, lines 13-15 of Krumm).

Sugiyama in view of Steele is combinable with Krumm because they are from the same field of endeavor, namely control and processing of time-based media data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to apply a foreground/background segmentation function to the time-based media data, as taught by Krumm. The motivation for doing so would have been that the foreground segment is needed to further segment for the purpose of identifying people and objects in an image (column 10, lines 15-18 of Krumm). Therefore, it would have been obvious to combine Krumm with Sugiyama in view of Steele to obtain the invention as specified in claims 25 and 102.

**Regarding claims 26 and 103:** Sugiyama in view of Steele does not disclose expressly that said multimedia function includes applying a scene segmentation function to said time-based media data.

Krumm discloses applying a scene segmentation function to time-based media data (column 10, lines 15-18 of Krumm).

Sugiyama in view of Steele is combinable with Krumm because they are from the same field of endeavor, namely control and processing of time-based media data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to apply a scene segmentation function to the time-based media data, as taught by Krumm. The motivation for doing so would have been that segmenting the foreground scene is needed to identify people and objects in an image (column 10, lines 15-18 of Krumm). Therefore, it would have been obvious to combine Krumm with Sugiyama in view of Steele to obtain the invention as specified in claims 26 and 103.



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**12. Claims 27-31 and 104-108 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sugiyama (US Patent 5,633,723) in view of Steele (US Patent 5,884,056), Krumm (US Patent 6,611,622 B1), and Chino (US Patent 6,118,888).**

**Regarding claims 27 and 104:** Sugiyama in view of Steele and Krumm does not disclose expressly that said multimedia function includes applying a face recognition function to the time-based media data.

Chino discloses applying a face recognition function to time-based media data (figure 20(406) and column 24, lines 25–27 of Chino).

Sugiyama in view of Steele and Krumm is combinable with Chino because they are from the same field of endeavor, namely the control and processing of time-based media data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to apply a face recognition function to time-based media data, as taught by Chino. The motivation for doing so would have been to determine which particular user corresponds to the current user by recognition of the current user's face (column 26, lines 20-22 of Chino). Therefore, it would have been obvious to combine Chino with Sugiyama in view of Steele and Krumm to obtain the invention as specified in claims 27 and 104.

**Regarding claims 28 and 105:** Sugiyama in view of Steele and Krumm does not disclose expressly that said multimedia function includes applying a face detection function to the time-based media data.

Chino discloses applying a face detection function to time-based media data (figure 20(406) and column 24, lines 25–27 of Chino).

Sugiyama in view of Steele and Krumm is combinable with Chino because they are from the same field of endeavor, namely the control and processing of time-based media data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to apply a face detection function to time-based media data, as taught by Chino. The motivation for doing so would have been to determine which particular user corresponds to the current user by recognition of the current user's face (column 26, lines 20-22 of Chino). Therefore, it would have been obvious to combine Chino with Sugiyama in view of Steele and Krumm to obtain the invention as specified in claims 28 and 105.

**Regarding claims 29 and 106:** Sugiyama in view of Steele and Krumm does not disclose expressly that the multimedia function includes applying an optical character recognition function to the time-based media data.

Chino discloses applying an optical character recognition function to time-based media data (figure 3(102j) and column 7, lines 14–18 of Chino).

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Sugiyama in view of Steele and Krumm is combinable with Chino because they are from the same field of endeavor, namely the control and processing of time-based media data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to apply an optical character recognition function to time-based media data, as taught by Chino. The suggestion for doing so would have been that character recognition from an electronic pen is simply another useful electronic means to input data into a computerized system (figure 3 and column 7, lines 2-11 of Chino). Therefore, it would have been obvious to combine Chino with Sugiyama in view of Steele and Krumm to obtain the invention as specified in claims 29 and 106.

**Regarding claims 30 and 107:** Sugiyama in view of Steele and Krumm does not disclose expressly that said multimedia function includes applying a face recognition function to the time-based media data.

Chino discloses applying a face recognition function to time-based media data (figure 20(406) and column 24, lines 25-27 of Chino).

Sugiyama in view of Steele and Krumm is combinable with Chino because they are from the same field of endeavor, namely the control and processing of time-based media data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to apply a face recognition function to time-based media data, as taught by Chino. The motivation for doing so would have been to determine which particular user corresponds to the current user by recognition of the current user's face (column 26, lines 20-22 of Chino). Therefore, it would have been obvious to combine Chino with Sugiyama in view of Steele and Krumm to obtain the invention as specified in claims 30 and 107.

**Regarding claims 31 and 108:** Sugiyama in view of Steele and Krumm does not disclose expressly that said multimedia function includes applying a face detection function to the time-based media data.

Chino discloses applying a face detection function to time-based media data (figure 20(406) and column 24, lines 25-27 of Chino).

Sugiyama in view of Steele and Krumm is combinable with Chino because they are from the same field of endeavor, namely the control and processing of time-based media data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to apply a face detection function to time-based media data, as taught by Chino. The motivation for doing so would have been to determine which particular user corresponds to the current user by recognition of the current user's face (column 26, lines 20-22 of Chino). Therefore, it would have been obvious to combine Chino with Sugiyama in view of Steele and Krumm to obtain the invention as specified in claims 31 and 108.

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**13. Claims 32, 34, 109 and 111 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sugiyama (US Patent 5,633,723) in view of Steele (US Patent 5,884,056) and Gerber (US Patent 5,568,406).**

**Regarding claims 32 and 109:** Sugiyama in view of Steele does not disclose expressly that said multimedia function includes applying an automobile recognition function to said time-based media data.

Gerber discloses applying an automobile recognition function to time-based media data (column 8, lines 42-45 of Gerber).

Sugiyama in view of Steele is combinable with Gerber because they are from the same field of endeavor, namely the control and processing of time-based image data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to apply an automobile recognition function to said time-based media data, as taught by Gerber. The motivation for doing so would have been to determine from the time-based media data whether or not the automobile in the time-based media data is stolen (column 8, lines 45-46 of Gerber). Therefore, it would have been obvious to combine Gerber with Sugiyama in view of Steele to obtain the invention as specified in claims 32 and 109.

**Regarding claims 34 and 111:** Sugiyama in view of Steele does not disclose expressly that said multimedia function includes applying a license plate recognition function to said time-based media data.

Gerber discloses applying a license plate recognition function to time-based media data (column 3, lines 42-47 and lines 63-64 of Gerber).

Sugiyama in view of Steele is combinable with Gerber because they are from the same field of endeavor, namely the control and processing of time-based image data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to apply a license plate recognition function to said time-based media data, as taught by Gerber. The motivation for doing so would have been to determine from the time-based media data whether or not the automobile in the time-based media data is stolen (column 1, line 66 to column 2, line 2 of Gerber). Therefore, it would have been obvious to combine Gerber with Sugiyama in view of Steele to obtain the invention as specified in claims 34 and 111.

**14. Claims 33 and 110 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sugiyama (US Patent 5,633,723) in view of Steele (US Patent 5,884,056), Gerber (US Patent 5,568,406), and Chino (US Patent 6,118,888).**

**Regarding claims 33 and 110:** Sugiyama in view of Steele and Gerber does not disclose expressly that the multimedia function includes applying a motion analysis function to the time-based media data.

Chino discloses applying a motion analysis function to time-based media data (figure 3(102f) and column 7, lines 33-38 of Chino).

Sugiyama in view of Steele and Gerber is combinable with Chino because they are from the same field of endeavor, namely the control and processing of time-based media data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to apply a motion analysis function to time-based media data, as taught by Chino. The suggestion for doing so would have been that detection of a user's motion and gestures is simply another useful electronic means to input data into a computerized system (figure 3 and column 7, lines 2-11 of Chino). Therefore, it would have been obvious to combine Chino with Sugiyama in view of Steele and Gerber to obtain the invention as specified in claims 33 and 110.

**15. Claims 36-39, 44-45, 51-58, 63, 73 and 75 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sugiyama (US Patent 5,633,723) in view of Steele (US Patent 5,884,056) and Hymel (US Patent Application Publication 2003/0220988 A1).**

**Regarding claims 36-39 and 44-45:** Sugiyama in view of Steele does not disclose expressly that said user interface is configured to allow a user to control a compact disc (CD) device, a digital video disc (DVD) device, an audio tape device, a video tape device, a MIDI player, and/or a cellular telephone.

Hymel discloses a user interface configured to allow a user to control (para. 10, lines 1-5 of Hymel) a compact disc (CD) device (para. 10, lines 14-15 and lines 19-20 of Hymel), a digital video disc (DVD) device (para. 10, lines 14-15 and lines 20-21 of Hymel), an audio tape device (audio tape device is a type of audio player, MP3 player is merely an example) (para. 10, lines 14-15 and line 19 of Hymel), a video tape device (digital camcorder, which, as is well-known in the art, uses a digital video (DV) cassette tape) (para. 10, lines 14-15 and line 20 of Hymel), a MIDI player (MIDI player is a type of audio player, MP3 player is merely an example) (para. 10, lines 14-15 and line 19 of Hymel), and/or a cellular telephone (para. 10, lines 14-15 of Hymel).

Sugiyama in view of Steele is combinable with Hymel because they are from similar problem solving areas, namely the control of data storage and output. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to configure said user interface so that the user interface allows a user to control a compact disc (CD) device, a digital video disc (DVD) device, an audio tape device, a video tape device, a MIDI player, and/or a cellular telephone, as taught by Hymel. The motivation for doing so would have been to allow a user to connect a variety of different types of peripheral devices to an overall system, thus allowing the user to perform a variety of functions (para. 2, lines 1-6 of Hymel). Therefore, it would have been obvious to combine Hymel with Sugiyama in view of Steele to obtain the invention as specified in claims 36-39 and 44-45.

**Regarding claims 51-58, 63, 73 and 75:** Sugiyama in view of Steele does not disclose expressly that the second output device is a DVD drive, CD drive, audio tape drive, video cassette device, removable media device, embedded audio recorder, embedded video recorder, non-volatile storage device, cellular telephone, hardware for performing audio capture, and/ or a disposable media writer.

Hymel discloses a user interface configured to allow a user to control as an output device (para. 10, lines 1-5 of Hymel) a DVD drive (para. 10, lines 14-15 and lines 20-21 of Hymel), CD drive (para. 10, lines 14-15 and lines 19-20 of Hymel), audio tape drive (audio tape drive is a type of audio player, MP3 player is merely an example) (para. 10, lines 14-15 and line 19 of Hymel), video cassette device (digital camcorder, which, as is well-known in the art, uses a digital video (DV) cassette tape) (para. 10, lines 14-15 and line 20 of Hymel), removable media device (the compact discs used in compact disc devices are well-known to be removable media devices) (para. 10, lines 14-15 and lines 19-20 of Hymel), embedded (para. 10, lines 22-26 of Hymel) audio recorder (para. 10, lines 14-15 and line 19 of Hymel), embedded (para. 10, lines 22-26 of Hymel) video recorder (para. 10, lines 14-15 and line 20 of Hymel), non-volatile storage device (compact disc devices and digital video disc devices are well-known to be non-volatile storage media devices) (para. 10, lines 14-15 and lines 19-21 of Hymel), cellular telephone (para. 10, lines 14-15 of Hymel), hardware for performing audio capture (as is well-known in the art, part of the function of a digital camcorder is to capture audio signals, along with the video) (para. 10, lines 14-15 and line 20 of Hymel), and/or a disposable media writer (compact discs (CD-R's) and digital video discs (DVD±R's) are well-known to be disposable media) (para. 10, lines 14-15 and lines 19-21 of Hymel).

Sugiyama in view of Steele is combinable with Hymel because they are from similar problem solving areas, namely the control of data storage and output. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to have the second output device be a DVD drive, CD

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drive, audio tape drive, video cassette device, removable media device, embedded audio recorder, embedded video recorder, non-volatile storage device, cellular telephone, hardware for performing audio capture, and/or a disposable media writer, as taught by Hymel. The motivation for doing so would have been to allow a user to connect a variety of different types of peripheral devices to an overall system, thus allowing the user to perform a variety of functions (para. 2, lines 1-6 of Hymel). Therefore, it would have been obvious to combine Hymel with Sugiyama in view of Steele to obtain the invention as specified in claims 51-58, 63, 73 and 75.

**16. Claims 40-41, 49, 59-61, 69 and 77 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sugiyama (US Patent 5,633,723) in view of Steele (US Patent 5,884,056) and Stevens (US Patent Application Publication 2002/0010641 A1).**

**Regarding claims 40-41 and 49:** Sugiyama in view of Steele does not disclose expressly that said user interface is configured to allow a user to control a multimedia server, encryption hardware, and/or a radio receiver.

Stevens discloses a user interface (figure 3(104) of Stevens) configured to allow a user to control a multimedia server (para. 53, lines 6-10 of Stevens), encryption hardware (para. 54, lines 1-9 of Stevens), and a radio receiver (figure 3 (110) and para. 36, lines 1-8 of Stevens).

Sugiyama in view of Steele is combinable with Stevens because they are from the same field of endeavor, namely the control and processing of time-based media data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to configure said user interface to allow a user to control encryption hardware and a radio receiver, as taught by Stevens. The motivation for doing so would have been to allow users to retrieve desired distributions of audio and video data over a controlled broadcast (para. 4, lines 1-5 of Stevens). Therefore, it would have been obvious to combine Stevens with Sugiyama in view of Steele to obtain the invention as specified in claims 40-41 and 49.

**Regarding claims 59-61, 69 and 77:** Sugiyama in view of Steele does not disclose expressly that the second output device is an embedded multimedia server, audio encryption hardware, video encryption hardware, a satellite radio receiver and/or a wireless device.

Stevens discloses controlling as an output device an embedded multimedia server (para. 53, lines 6-10 of Stevens), audio encryption hardware (para. 54, lines 1-4 and para. 57, lines 3-4 of Stevens), video encryption hardware (para. 54, lines 1-4 of Stevens), a satellite radio receiver (para. 36, lines 1-6 of Stevens), and/or a wireless device (para. 36, lines 1-6 of Stevens). As is well-known in the art, a satellite radio receiver is a type of wireless device.

Sugiyama in view of Steele is combinable with Stevens because they are from the same field of endeavor, namely the control and processing of time-based media data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to have the second output device be an embedded multimedia server, audio encryption hardware, video encryption hardware, and/or a satellite radio receiver, as taught by Stevens. The motivation for doing so would have been to allow users to retrieve desired distributions of audio and video data over a controlled broadcast (para. 4, lines 1-5 of Stevens). Therefore, it would have been obvious to combine Stevens with Sugiyama in view of Steele to obtain the invention as specified in claims 59-61, 69 and 77.

**17. Claims 46, 64, 66-68 and 71 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sugiyama (US Patent 5,633,723) in view of Steele (US Patent 5,884,056), Stevens (US Patent Application Publication 2002/0010641 A1), and McCarthy (US Patent 6,296,693 B1).**

**Regarding claim 46:** Sugiyama in view of Steele does not disclose expressly that said user interface is configured to allow a user to control a two-way radio.

Stevens discloses a user interface (figure 3(104) of Stevens) configured to allow a user to control a radio receiver (figure 3(110) and para. 36, lines 1-8 of Stevens).

Sugiyama in view of Steele is combinable with Stevens because they are from the same field of endeavor, namely the control and processing of time-based media data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to configure said user interface to allow a user to control a radio receiver, as taught by Stevens. The motivation for doing so would have been to allow users to retrieve desired distributions of audio and video data over a controlled broadcast (para. 4, lines 1-5 of Stevens). Therefore, it would have been obvious to combine Stevens with Sugiyama in view of Steele.

Sugiyama in view of Steele and Stevens does not disclose expressly that said radio is specifically a two-way radio.

McCarthy discloses using a two-way (CB) radio (column 7, lines 13-16 and lines 21-23 of McCarthy).

Sugiyama in view of Steele and Stevens is combinable with McCarthy because they are from similar problem solving areas, namely the control of data communication hardware. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to provide for user control of a radio, as taught by Stevens, wherein said radio is specifically a two-way radio, as taught by McCarthy. The motivation for doing so would have been to provide the user with means of personal communication.

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Therefore, it would have been obvious to combine McCarthy with Sugiyama in view of Steele and Stevens to obtain the invention as specified in claim 46.

**Regarding claims 64, 66-68 and 71:** Sugiyama in view of Steele does not disclose expressly that the second output device is a two-way radio, a radio receiver for receiving AM signals, a radio receiver for receiving FM signals, a radio receiver for receiving short wave radio signals, and/or an emergency alert monitor for receiving emergency broadcast system alerts.

Stevens discloses controlling as an output device a radio receiver (para. 36, lines 1-6 of Stevens).

Sugiyama in view of Steele is combinable with Stevens because they are from the same field of endeavor, namely the control and processing of time-based media data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to have the second output device be a radio receiver, as taught by Stevens. The motivation for doing so would have been to allow users to retrieve desired distributions of audio data over a controlled broadcast (para. 4, lines 1-5 of Stevens). Therefore, it would have been obvious to combine Stevens with Sugiyama in view of Steele.

Sugiyama in view of Steele and Stevens does not disclose expressly that said radio receiver is a two-way radio, a radio receiver for receiving AM signals, a radio receiver for receiving FM signals, a radio receiver for receiving short wave radio signals, and/or an emergency alert monitor for receiving emergency broadcast system alerts.

McCarthy discloses output devices including a two-way (CB) radio (column 7, lines 13-16 and lines 21-23 of McCarthy), a radio receiver for receiving AM signals (column 7, lines 13-16 and lines 20-21 of McCarthy), a radio receiver for receiving FM signals (column 7, lines 13-16 and lines 20-21 of McCarthy), a radio receiver for receiving short wave radio signals (column 7, lines 13-16 and lines 21-23 of McCarthy), and/or an emergency alert monitor for receiving emergency broadcast system alerts (column 7, lines 13-16 and lines 18-20 of McCarthy).

Sugiyama in view of Steele and Stevens is combinable with McCarthy because they are from similar problem solving areas, namely the control of data communication hardware. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to provide for user control of a radio, as taught by Stevens, wherein said radio is specifically a two-way radio, a radio receiver for receiving AM signals, a radio receiver for receiving FM signals, a radio receiver for receiving short wave radio signals, and/or an emergency alert monitor for receiving emergency broadcast system alerts, as taught by McCarthy. The motivation for doing so would have been to provide the user with means of personal communication. Therefore, it would have been obvious to combine McCarthy with Sugiyama in view of Steele and Stevens to obtain the invention as specified in claims 64, 66-68 and 71.



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**18. Claim 48 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sugiyama (US Patent 5,633,723) in view of Steele (US Patent 5,884,056) and Wedekind (US Patent 5,115,967).**

**Regarding claim 48:** Sugiyama in view of Steele does not disclose expressly that said user interface is configured to allow a user to control a climate sensor.

Wedekind discloses computer control (column 4, lines 53-58 of Wedekind) of a climate sensor (column 5, lines 3-9 of Wedekind).

Sugiyama in view of Steele is combinable with Wedekind because they are from the same field of endeavor, namely the control and processing of time-based data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to configure said user interface to allow a user to control a climate sensor, as taught by Wedekind. The motivation for doing so would have been to control the overall climate of the room or building in which the printer system user is located. Therefore, it would have been obvious to combine Wedekind with Sugiyama in view of Steele to obtain the invention as specified in claim 48.

**19. Claim 70 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sugiyama (US Patent 5,633,723) in view of Steele (US Patent 5,884,056) and Rowe (US Patent Application Publication 2001/0003846 A1).**

**Regarding claim 70:** Sugiyama in view of Steele does not disclose expressly that the second output device is a weather alert receiver.

Rowe discloses controlling as an output device a weather alert receiver (para. 62, lines 3-6 of Rowe).

Sugiyama in view of Steele is combinable with Rowe because they are from the same field of endeavor, namely the control and processing of time-based media data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to use a weather alert receiver as an output device, as taught by Rowe. The suggestion for doing so would have been that weather alert data is simply another form of useful multi-media data that a user may wish to obtain. Therefore, it would have been obvious to combine Rowe with Sugiyama in view of Steele to obtain the invention as specified in claim 70.

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**20. Claim 72 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sugiyama (US Patent 5,633,723) in view of Steele (US Patent 5,884,056) and Abgrall (US Patent 6,373,498 B1).**

**Regarding claim 72:** Sugiyama in view of Steele does not disclose expressly that the second output device is a weather alert receiver.

Abgrall discloses controlling as an output device hardware for performing VGA screen captures (column 12, lines 6-8 of Abgrall).

Sugiyama in view of Steele is combinable with Abgrall because they are from the same field of endeavor, namely the control and processing of time-based media data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to use hardware to perform VGA screen captures, as taught by Abgrall. The suggestion for doing so would have been that a VGA screen capture is simply another form of useful multi-media data that a user may wish to obtain. Therefore, it would have been obvious to combine Abgrall with Sugiyama in view of Steele to obtain the invention as specified in claim 72.

### ***Conclusion***

21. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JAMES A. THOMPSON whose telephone number is (571)272-7441. The examiner can normally be reached on 8:30AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward L. Coles can be reached on 571-272-7402. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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/Edward L. Coles/  
Supervisory Patent Examiner, Art Unit 2625

/J. A. T./  
Examiner, Art Unit 2625

26 March 2008